



**Figure 14.5** Proportion of non-adherent patients taking a twice-daily, once-daily or single-tablet regimen in an analysis of a cohort of HIV-infected individuals in Italy.

The EFV/FTC/TDF STR maintained an advantage in improving adherence compared with other ARV regimens in a study of self-reported adherence in 372 subjects attending a reference center for HIV treatment in Florence, Italy. Four measures of adherence were included in the self-administered questionnaire: (1) the proportion of ART doses taken over the preceding month, as measured by VAS; (2) any missed doses over the past week; (3) spontaneous treatment interruption of two or more days in the past 3 months; and (4) a lack of drug refill after finishing the drug in the past 3 months. Patients were defined as non-adherent if reporting any of the following: <math>< 90\%</math> of pills taken in the last month, one or more missed doses in the last week, or a spontaneous treatment interruption or refill problems in the last 3 months. Patients on the STR had the highest percentage of adherence in terms of mean percentage of pills taken in the last month (97.8%) and also a significantly lower proportion of non-adherence (17.4%;  $p < 0.05$ ) compared with patients on non-STR regimens (Figure 14.5). Additionally, patients on the STR (OR: 0.45, 95% CI 0.22–0.42) reported lower non-adherence in a multivariable logistic regression analysis.<sup>27</sup>

### 14.3 Persistence

Persistence, defined as the duration of continuous pharmacological treatment, from initiation to discontinuation, is another important aspect of HIV management that is affected by regimen dosing. In contrast to adherence, which measures the compliance of patient behavior with a prescribed treatment regimen (as described in the previous section), persistence measures the duration or number of days during which a patient remains on a prescribed therapy without exceeding a permissible gap. Persistence is critical for HIV treatment since ARV therapy is lifelong and decreased persistence is associated with increased rates of virological failure, resistance development and less favorable clinical outcomes. Regimen complexity is one key treatment